## Research Profile

# Office of Public Health Studies

Myron B. Thompson School of Social Work

### **Office of Public Health Studies**

Myron B. Thompson School of Social Work

MBTSSW Dean Noreen Mokuau OPHS Director Kathryn Braun

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### Message from the Director

or more than 50 years, the Office of Public Health Studies has educated public health professionals and conducted research that benefits the people of Hawai'i and the Asia-Pacific region. We offer nationally accredited bachelor's, master's, and doctoral degrees. Our 30 faculty are experts in topics ranging from infectious disease to chronic disease, from



child health to end of life, from genetics to the environment, and from health promotion and prevention to treatment and services. We collaborate with 10+ branches of the Hawai'i Department of Health (HDOH). In 2017, our Office secured \$3.8 million in extramural funds from the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), HDOH, and others. Our faculty have collaborations with individuals in 70+ international universities.

E kipa mai. We invite you to learn more about growing programs at UH Mānoa Office of Public Health Studies.

**Kathryn Braun**, *DrPH* Director and Professor



## 2 Our Faculty

Our 30 faculty are experts in topics ranging from infectious disease to chronic disease, from child health to end of life, from genetics to the environment, and from health promotion and prevention to treatment and services.

Al Katz. Bacterial sexually transmitted infections and leptospirosis.

**Andrew Grandinetti.** Chronic disease risks, obesity, and race/ethnic differences in Hawai'i's population, the Multi-Ethnic Cohort, and the Honolulu Asia Aging Study.

**Becky Rodericks.** Evaluation of programs promoting physical activity, nutrition, and tobacco-free lifestyles as ways to reduce the risk of chronic disease.

**Bob Cooney.** Prevention of inflammatory damage and the role of gamma-tocopherol, a vitamin E analogue.

**Catherine Pirkle.** Women's health across the life-course, in the United States and internationally.

**Cheryl Albright.** Randomized clinical trials of interventions modifying multiple health behaviors to lower chronic disease risks, neighborhood obesogenic attributes. Innovative eHealth interventions.

**Claudio Nigg.** Measurement, theory and understanding of health behavior change for physical activity and obesity prevention. Evaluation of programs to reduce alcohol and opioid abuse.

**David Stupplebeen.** Studies of multiracial identity and mental health. Evaluation of partnerships and programs related to chronic disease prevention.

**Denise Nelson-Hurwitz.** Undergraduate public health educational pedagogy. Experiential & applied learning techniques. Healthy food access in low-income communities.

**Elizabeth McFarlane.** Early childhood health and evaluation of interventions, programs, and policies aimed to help children born into families experiencing risk.

**Eric Hurwitz.** Spinal disorders, back and neck pain, complementary-alternative medicine, treatment efficacy, and epidemiologic methods.

Jane Chung-Do. Youth and family wellness in rural and minority communities in Hawai'i, aquaponics, and community-based participatory research.

**Jason Mitchell.** Efficacious health promotive and preventive interventions that leverage the use of technology for couples, men, and LGBTQ persons.

**Jeanelle Sugimoto-Matsuda.** Community mental health, suicide prevention, violence prevention, indigenous health, health systems, policy, advocacy.

## **Extramural** Funding Sources

#### **FEDERAL**

- National Institutes of Health (NIH)
  - National Cancer Institute
  - National Heart, Lung, & Blood Institute
  - National Institute of Aging
  - Eunice Kennedy Shriver
  - National Institute for Child Health & Development
  - National Institute of Diabetes & Digestive & Kidney Diseases
  - National Institute on Drug Abuse (NIDA)
  - National Institute of General Medical Sciences
  - National Institute of Mental Health (NIMH)
  - National Institute of Minority Health & Disparities (NIMHD)
  - National Institute of Nursing Research
  - Fogarty International Center (FIC)
- Agency for Healthcare Research and Quality (AHRQ)
- Health Resources & Service Administration (HRSA)
- Department of Agriculture (USDA)
- **❖** Department of Defense (DOD)
- US Army Medical Research & Materiel Command / Telemedicine & Advanced Technology Research Center
- National Institute of Standards & Technology, and others

### **INTERNATIONAL**

- Canadian Institutes of Health Research
- Northern Contaminants Program
- ArcticNet
- Peking University, and others

## **Extramural** Funding Sources

#### STATE OF HAWAI'I

- **❖** Hawai'i Department of Health
  - Executive Office of Aging
  - Office of Planning, Policy & Program Development
  - Maternal & Children Health Branch
  - Emergency Medical Services & Injury Prevention System Branch
  - Chronic Disease Prevention & Health Promotion Division
  - Hawai'i Comprehensive Cancer Control Program
  - Alcohol & Drug Abuse Division, and others
- Office of Hawaiian Affairs (OHA)
- \* Honolulu Liquor Commission

### FOUNDATIONS AND NON-PROFITS

- Robert Wood Johnson Foundation
- ❖ DentaQuest Foundation
- HMSA Foundation
- Hawai'i Community Foundation
- Hawai'i Dental Service Foundation
- Hawai'i Pacific Health Foundation
- Center for Global Development
- **❖** Trustees of Harvard University
- Hyundai Hope on Wheels Foundation
- Friends of the Cancer Center
- ❖ Women's Fund of Hawai'i
- **❖** American Cancer Society
- ❖ American Heart Association
- Leahi Foundation
- \* Robert C. Perry Fund
- Queen's Medical Center, and others

**Kathryn Braun.** Community-based participatory research, gerontology, health promotion, and Native Hawaiian and minority health.

**Lehua Choy.** Evaluation of community coalitions, built environment initiatives to promote physical activity, and chronic disease prevention programs.

**Lisa Kehl.** Drug and alcohol prevention and education, tobacco use prevention and cessation, and tobacco policy and advocacy.

**Maile Taualii.** Utility and validity of health information for racial minorities. Perceptions of bio-banking for research among Native Hawaiians.

May Rose Dela Cruz. Underage drinking prevention, increasing HPV vaccination uptake, and reducing cancer health disparities in Native Hawaiian, Filipino, and Pacific Islander populations.

**Meghan McGurk.** Evaluation to improve impact of activities that increase physical activity, improve nutrition, and reduce chronic disease.

Michiyo Tomioka. Healthy aging, cultural adaptation of evidence-based programs, and evaluation.

**Ngoc Vu.** Evaluation research focusing on the impact of community health initiatives.

**Sara Carr.** The built environment and public health, and how buildings, landscapes, and urban design influence behavior and environmental outcomes.

**Tetine Sentell.** Health disparities, race/ethnicity, and health communication, particularly health literacy and English language proficiency.

**Thomas Lee.** Epidemiology of inflammation between metabolic and cognitive diseases in the Honolulu Asia Aging Study.

**Valerie Yontz.** Gerontology, aging, fall prevention, public health nursing. Practicum Coordinator. Hawai'i Public Health Training

**Vanessa Buchthal.** Food insecurity and dietary behavior in low-income communities. Family and community social networks, and other social and environmental factors.

**Victoria Fan.** Costs, effectiveness, and benefits of policies for health including health insurance, financing, and workforce. Econometric methods for causal inference.

**Yan Yan Wu.** Longitudinal/multilevel data analysis, statistical methodologies for genomic and epigenomic data, genetic epidemiology, epi-genetics, health disparities.

**Yuanan Lu.** Novel methods for therapeutic control of human viral pathogens and for enhanced monitoring and assessing of water quality.

### 4 Our Featured Research



Evaluation of the Kōkua Kalihi Valley REACH Initiative (Buchthal) uses a participatory methodology with Kalihi community members to assess the impact of a cultural food hub initiative on improving access to healthy,

culturally valued foods in a low-income Filipino and Pacific Islander community. Funder: CDC

Backyard Aquaponics: Promoting Healthy Eating among Native Hawaiian Families (Chung-Do) is testing feasibility of a culturally grounded family-based aquaponics intervention in rural Native Hawaiian communities. Partners: God's Country Waimanalo, UH College of Tropical Agriculture, Waimanalo Pono Research Hui. Funder: Ola HAWAII

Waipahu Health Action Research and Training Project (Nigg) trains high school students to promote physical activity and healthy eating among their peers. Partner: Waipahu High School. Funder: HMSA Foundation

Health Behavior Interventions to Reduce Chronic Disease (Albright, Nigg) including multiple projects to modify physical activity, sedentary behaviors, and dietary intake in pregnant and/or postpartum women, older adults, cancer survivors, and hotel workers. Partners: CTAHR, SONDH, UH Cancer Center, 3 Kaiser Centers for Health Research, and others. Funders: NIH (8 different institutes), DOD, AHRQ, HRSA, various private foundations

**Tobacco Sales to Minors** (Albright). Underage tobacco compliance surveillance and enforcement. Evaluation of the implementation of State Tobacco Plan. Partners: HDOH, CDC, FDA

### Collaborations with the Chronic Disease Prevention and Health Promotion Division and Healthy Hawai'i Initiative

#### Hawai'i Health Data Warehouse (HHDW)

(Rodericks) standardizes collection and management of Hawai'i's health data and provides public health data to support health professionals, health agencies, and the community (www.hhdw. org). Funder: HDOH

State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke (Choy, Stupplebeen, McGurk) works to evaluate efforts focused on physical activity and nutrition, hypertension, and prediabetes. Partners: Hawai'i Public Health Institute (HIPHI), Hawaii Primary Care Association (HPCA). Funder: HDOH (CDC 1422)

State Public Health Actions to Prevent and Control Diabetes, Heart Disease Obesity and Associated Risk Factors and Promote School Health (Pirkle, McGurk, Vu, Rodericks, Sentell) works to evaluate efforts focused on physical activity and nutrition to better identify patients with (pre)diabetes and hypertension. Partners: Hawai'i Department of Education (DOE), Mountain Pacific Quality Health. Funder: HDOH (CDC 1305)

Social Epidemiology Evaluation Contract (Sentell, Pirkle, Choy, McGurk, Rodericks, Stupplebeen, Vu, Buchthal) is a statewide initiative to support healthy lifestyles by implementing policies and programs to create sustainable changes. In 2017-2018, 16 evaluation projects ranging from change in nutritional composition of school food service procurement, to wayfinding signage, to clinical-community linkages in Federally Qualified Health Centers using community health workers, to identifying undiagnosed chronic disease using electronic medical records. Partners: CDC, DOE, HIPHI, HPCA. Funder: HDOH

Current evaluations include School Health Initiatives (Rodericks), Hawai'i State Physical Activity and Nutrition (PAN) Plan (McGurk, Choy, Buchthal), "Choose Healthy Now" Project (McGurk), Healthy Eating Active Living (HEAL) Community Coalitions (Choy), and Diabetes Self-Management Education Programs (Pirkle, Vu).

Hawai'i Pedestrian Environment Data Scan (PEDS) (Carr, Choy) employs observational audits of street segments to assess environmental features that support walking. Funder: HDOH

**Evaluation of the HDOH SNAP-Ed Program** (Buchthal) uses geographic analysis to map community food assets and improve food insecurity in low-income communities. Funder: USDA

Costs of Care for Diabetes Patients and Economic Evaluation of Diabetes Prevention Program in Hawai'i (Fan). Partner: Hawai'i Department of Commerce and Consumer Affairs. Funder: HDOH (CDC 1305)

### Our Featured Research 5

RMATRIX and Ola HAWAII at JABSOM (Hedges, Mokuau) aim to decrease health disparities experienced by Native Hawaiians, Pacific Islanders, and Filipinos in Hawai'i by supporting university and community-based research. Braun is Co-Lead of the Community-Based Research Core of RMATRIX and Co-Lead of the Community Engagement Core of Ola HAWAII. Several faculty (Chung-Do, Dela Cruz, Fan, Pirkle, Sentell, Wu) received pilot funding. Funder: NIH NIMHD

World Spine Care (Hurwitz) establishes clinics to deliver evidence-based spine care in low- and middle-income countries. Global Spine Care **Initiative** is developing a model of spine care that would be appropriate for, and can be adapted to, communities with varying levels of resources.

Active Aging Consortium Asia Pacific (ACAP) (Braun, Tomioka) is a network of gerontologists from more than 20 countries who develop and test programs and policies in support of healthy aging. Different countries are testing approaches to building agefriendly communities, extending the retirement age, providing long-term care (including models that rely on foreign care workers), and promoting community-based services and senior living facilities.

Hā Kūpuna National Resource Center for Native Hawaiian Elders at MBTSSW (Mokuau, Browne) examines health, longevity, disparities and resilience of Native Hawaiian elders in Hawai'i and on the Continental US (Braun, Tomioka, Wu). Partners: Alu Like, HDOH State and County units on aging, Lunalilo Home, OHA. Funder: US Administration for Community Living

**Geriatric Workforce Enhancement Program at** JABSOM (Wen) aims to improve skills of families and providers caring for older adults, especially those with dementia. Braun is evaluator, Funder: HRSA

Hawai'i Healthy Aging Partnership (HAP) (Tomioka) embeds evidence-based health promotion programs for older adults, with evaluation and statewide coordination. Partners: State and County units on aging, HDOH, National Kidney Foundation, HPCA, and others. Funder: HDOH

Menopause and Physical Function in Older Women from the Canadian Longitudinal Study on Aging (CLSA) and the International Mobility in Aging Study (Pirkle) and A Person-Centered Index of Aging Well and its Determinants in North America (Wu, Pirkle). Partners: Brown University, Queen's University, University of Montreal, Universidad Nacional Autonoma de Mexico, Funder: CIHR

Multiethnic Genome-Wide Association Studies and Gene-Environmental Studies of Obesity and Type 2 **Diabetes** (Wu, Pirkle, Grandinetti). Partners: UH Cancer Center, University of California San Francisco (UCSF)

Methylation, Exclusive Breastfeeding, and Child **Growth Trajectory** (Wu). Partner: University of Toronto

Microbial Indicators for Water Quality Monitoring (Lu) tests and establishes possible use of human enteric viruses as a more effective indicator for water quality monitoring and risk assessment. Partners: Wuhan University, Nanchang University, UHM Water Research Resource Center



## **6** Our Featured Research

Leveraging Relationship Science and Technology to Enhance Couples' Health (Mitchell) develops and tests technology-based, tailored preventive interventions across a variety of health domains (HIV prevention, substance use prevention, LGBT health). Partners: Softura, University of Michigan, University of Minnesota, University of Miami, Medical College of Wisconsin, University of California Los Angeles, University of Rochester, University of Southern California, Universidad of Peruana Cayetano Heredia. Funders: NIH NIDA and NIMH

Identifying the Traumas Experienced by Sex Trafficked Victims and Developing Solutions (Chung-Do) aims to identify factors that contribute to the victims' entry into, continued involvement, and exit from sex trafficking. Partners: Pacific Survivor

Center, Susannah Wesley Community Center, Sex Abuse Treatment Center

Factors Influencing Cesarean Delivery Among Micronesian Women in Hawai'i (Pirkle). Partner: UH JABSOM. Funder: Ola HAWAII

Life-course Pathways Linking Adolescent Childbearing to Chronic Conditions (Pirkle, Sentell). Partners: Federal University of Rio Grande do Norte, Federal University of Pelotas, University of Toronto. Funder: NIH FIC

**Na Mikimiki Study** (Albright) examined effects of tailored technology and counseling on physical activity of postpartum women. Partners: CTAHR, UH Cancer Center, UCSF

Surveillance of Emerging Antimicrobial Resistant Neisseria Gonorrhoeae (Katz). Partners: HDOH, CDC

Development of Novel Therapeutic Approaches to Combat HIV Infection and Development of More Effective Drug Delivery into the Central Nervous System (neuroAIDS Therapy) (Lu). Partners: University of Rochester, University of Nebraska, UH JABSOM

Alcohol Compliance and Enforcement (ACE) Project (Dela Cruz). Partners: HDOH, Honolulu Police Department, Honolulu Liquor Commission

Evaluation of the Prescription Drug Overdose: Data-Driven Planning and Data Project (Nigg) examines, evaluates, and supports planning to address prescription drug (opioid) use and abuse in Hawai'i. Partners: HDOH

State Epidemiological Outcome Workgroup (SEOW) Project (Nigg) supports the Strategic Prevention Framework - Partnership for Success initiative. Partners: HDOH, UH Center of the Family



Assessing Providers' Views of Pharmacists as Vaccinators (Dela Cruz). Partners: UH Hilo College of Pharmacy, UH JABSOM. Funder: RMATRIX

Public Health Workforce Development and Training (Yontz) partners with Western Region Public Health Training Center and leads Hawai'i Public Health Training Hui. Partners/Funders: HRSA Region 9, Univ. of Nevada, California AHEC, Univ. of Arizona, Pacific Island Health Officers' Association

Health Literacy in Social Networks: Building Evidence, Consolidating Theory, and Refining Measurement (Sentell). Funder: Clinical & Translational Research Infrastructure Network

Understanding and Reducing Ethnic Disparities in Preventable Hospitalizations (Sentell). Funders: UH JABSOM, NIH NIMHD

Hospital Quality Reports for Expectant Mothers: Considering Race and Language (Sentell) Funder: AHRQ

**Economic Evaluation for Health** (Fan) assesses costs and benefits of several policies (diabetes prevention, dental sealants, housing, etc.). Partners/Funders: HDOH, OHA, UCSF, others

Healthcare Data Analytics for Claims and Clinical Data (Fan, Wu). Partner: UH Social Science Research Institute Pacific Health Informatics & Data Center, HDOH

Health Financing, Insurance, and Payment for Improving Access and Controlling Costs in the US and Asia (Fan). Partners: National Yang Ming University, China Medical University, Thai Ministry of Public Health, others

## 2017 Fact Sheet 7

### **Education**



**Partnership** 



Research



**Educated 270 students** and graduated 60 BAs, 37 MPH/MS, 6 doctoral students to address public health issues in our local and global communities, joining our network of 3900+ alumni

Played a major role in the Hawai'i Public Health Training Hui, cosponsoring 25 trainings attended by 3,258 public health colleagues

Published more than 75 papers in peer-reviewed journals indexed on the National Library of Medicine PubMed in a year

Won awards for best graduate student researcher Mapuana Antonio and best teacher of undergraduates Dr. Denise Nelson-Hurwitz

Assisted more than 10 branches and programs of the Hawai'i Department of Health with assessment, planning, monitoring, data, research, and evaluation services

Conducted research and evaluation funded by NIH, CDC, and others creating local jobs and supporting education and training of indigenous and minority students

Contributed to a lifetime total of 1 million hours of service through student practica, classroom, and service learning

Worked with UH Schools of Social Work, Nursing, Medicine, and Pharmacy to develop interprofessional education opportunities

Engaged with more than 70 international universities on public health research and training

Index by Topic (Faculty Initials)

Aging. AG CP KB MTo VY

Air quality. YL

Alcohol abuse. MRDC LK

Applied & experiential learning. CN DNH JCD VF VY

Asian health. AG TLTS

Behavior change, multiple. CN JM

Behavioral risk factors. CA LK

Biobanking. MTa Brain health. VY

Brazil. CP Buildings. SC

Built environment. SC LC

Cancer health disparities. KB MRDC

Cancer navigation. KB

Cancer. BC

Carotenoids. BC

Child development. EM

Child health. CP CN EM

China. VF YL YW Chlamydia. AK

Chronic disease. AG CATLTS VF

Chronic disease epidemiology. AG

Chronic disease self-management. MTo

Chronic disease prevention. CN BR MM

Clinical epidemiology. EH

Community coalitions. MRDC LK

Community-based participatory

research. JCD KB

Community-university partnerships.

JCD KB VY

Complementary & alternative medicine. EH KB

Cost-benefit analysis. VF Cost-effectiveness. VF

Costs. VF Couples. JM

Cross-sector collaboration. LC VF

Cultural competency. DS

Demography. VF YW

Diabetes. AG CP TL VF YW

Dietary behavior. VB

Early childhood. EM BR

Economic evaluation. VF

Electronic health (eHealth). JM

Environmental contaminants. CP

Environmental factors. VB DNH

Environmental health. SC YL

Epidemiology. AG AK BC CP EH VF YW

**Epigenetics. YW** 

Evaluation. BR KB MM MTo VF VY

Fall prevention. MTo VY

Family. EM JCD

Filipino populations. MRDC

Food systems, security and safety. CP

DNH JCD VB VF

Gender violence. JCD

Gene therapy. YL

Gene-environment. YW CP

Genetic epidemiology, YW

Gerontology. KB MT VY

Global health. CP KB VF

Gonorrhea, AK

Health behavior. CA CN KB

Health communication. TS

Health disparities. CA CN EM KB TS

Health economics. VF

Health education. MRDC LK

Health financing, VF

Health informatics. MTa VF

Health insurance. VF

Health literacy. TS

Health policy and management. CP EM

LK JM JSM MM TS VF

Health professionals. DNH VY VF

Health promotion. CA CN KB LK VY

Health systems. VF

HIV/AIDS. JM YL

Home visiting. EM VY

HPV prevention. MRDC

Indigenous health. JCD JSM KB MTa

Inflammation. BC TL

International, CP KB VF

Intervention development,

implementation, and evaluation. CA

CN EM KB

Investigator development. KB

Landscapes. SC

Latin America. CP JM

Leptospirosis. AK

LGBT health. JM

Life-course epidemiology. CP

Liquor consumption. MRDC

Longitudinal analysis. CP CN EM VF YW

Low-income communities. VB

Maternal & child health, CP EM

Measurement development and

validation. CN

Mental health. JCD JSM TS

Mental health, community. JSM

Methods, econometric. VF

Methods, epidemiologic. EH

Methods, statistical, VF YW.

Microbial indicators. YL

Minority health. AG JCD KB MTa

Mixed methods. JCD KB

Mobile health. JM

Multilevel models. YW

Musculoskeletal disorders. EH

Native Hawaiian health. JCD KB MRDC MTa

Nitric oxide. BC

Nitrogen oxide. BC

Nutrition. BR MM CN

Obesity prevention. CN BR

Obesity. AG CA CN CP VF YW

Obesogenic attributes, neighborhood. CA

Obstetric care. CP

Older adults. CP CN KB TL VY YW

Optimization strategies. JM

Oxidative damage. BC

Pacific Islander health. MRDC TS

Pain, back. EH

Pain, neck. EH

Parenting. EM

Physical activity. CN SC BR LC MTo

Program evaluation. BR KB MTo VY

Public health nursing, VY

Race/ethnicity. AG KB TS

Relationship science. JM

Research translation. CN Risk adjustment. VF

Rural health. JCD

School connectedness. JCD

School health. BR VF

School readiness. EM

Service learning. DNH LK

Sexually transmitted infectious. AK

Smoking cessation. BR LK

Social and behavioral health sciences.

CA CN JCD JM JSM KB VB

Social capital. SC VB

Social context. TS

Social justice. JCD

Social networks, community & family.

**DNH VB** 

Spinal disorders. EH

Substance use/abuse. CN JM LK

Suicide prevention. JSM

Syphilis. AK

Technology, innovative. CA

Telehealth. JM

Tocopherol. BC

Training. VY

Treatment efficacy. EH

uHealth. JM

Underage drinking prevention. CN

**MRDC** United States. CP VF

Urban design. SC

Vitamin D. BC

Vitamin E. BC

Water monitoring. YL

Youth wellness. JCD Women's health. CP

### **Index by Region**

Africa, CP EH

Australia and New Zealand. EM MTa VF

YW

Canada, CP EH EM JCD MTa YW

China. KB VF VW VL VY Europe. CP CA CN EH TS VF

Japan. EH KB MTo

South Korea. KB VF Taiwan. VF

Latin America, CP JM TS VY YW

Pacific Islands. EH EM KB VF VY VW South and Southeast Asia. KB VF VY